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10/595,815	05/25/2007	Gunter Kindel	51534	7147

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ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.
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SUITE 600
WASHINGTON,, DC 20036

EXAMINER

SIMMONS, CHRIS E

ART UNIT	PAPER NUMBER
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1612

MAIL DATE	DELIVERY MODE
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07/06/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/595,815

Applicant(s)

KINDEL ET AL.

Examiner

CHRIS SIMMONS

Art Unit

1612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/12/2006

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claims 4-17 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 4-17 have not been further treated on the merits.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,688,491 ("Shahidi") in view of US 5,628,986 ("Sanker"), Heath, Henry B. Source Book of Flavors. NY: Van Nostrand Reinhold, 1981. – "Heath"), m-dimethoxybenzene (Food and Chemical Toxicology, Volume 38, Supplement 3, 2000, Pages s59-s62 – "Food and Chemical Toxicology"), and MedicineNet.com (Taste and Smell. <http://www.medicinenet.com/script/main/art.asp?articlekey=212>; 10/24/2002) as evidenced by The Good Scents Company: "Salicylaldehyde" (<http://web.archive.org/web/20030719115435/http://www.thegoodscentscompany.com/data/rw1028641.html>) and US 5,795,616 ("Greenberg").

Shahidi discloses the compositions having incorporated a flavoring agent or a mixture of flavoring agents. Such flavoring agents are well known in the art. Those flavoring agents most suitable for use in the present invention include: anise, cassia, clove, dihydroanethole, estragole, eucalyptol, menthol, methyl salicylate, peppermint, oxanone, phenyl ethyl alcohol, sweet birch, eugenol, spearmint, cinnamic aldehyde, menthone, alpha-ionone, ethyl vanillin, limonene, isoamylacetate, benzaldehyde, thymol, ethylbutyrate and many others. These additional, or further optional, flavoring agents comprise from about 0.01% to about 5.0%, preferably from about 0.05% to about 2.0% and most preferably from about 0.1% to about 1.0% of the composition.

Shahidi does not expressly teach a mixture comprising A) dihydroanethole, B) o-anisaldehyde, C) 1,3-dimethoxybenzene and D) 2'-hydroxyacetophenone.

Sanker discloses dihydroanethole as a suitable flavoring agent. *See claim 4.*

Heath discloses o-anisaldehyde (*page 372*) and 2-hydroxyacetophenone (i.e., o-acetylphenol or 2'-hydroxyacetophenone) (*see page 364*) are known flavoring agent.

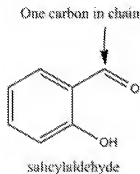
Food and Chemical Toxicology discloses m-dimethoxybenzene (i.e., 1,3-dimethoxybenzene) is a flavor ingredient. *See page 61 under 'Status' section.*

MedicineNet.com discloses both taste and smell are sensations that result when specialized nerve receptors in the mouth and nose detect molecules through chemoreception. The flavor in a food is due to a combination of taste and smell. *See MedicineNet.com.*

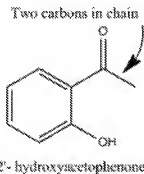
It would have been reasonable to consider the description of the odor of a compound to match the taste description of a compound since flavor depends on smell. Because the Good Scent Company discloses that the odor of salicylaldehyde is described as cinnamon-wintergreen, it would be reasonable to consider the taste as cinnamon-wintergreen as well.

It would have been prima facie obvious to have added A) dihydroanethole, B) o-anisaldehyde, C) 1,3-dimethoxybenzene and D) 2'-hydroxyacetophenone as the flavors of the composition described by Shahidi because each one is known individually in the prior art as suitable flavor agents. Additionally, one of ordinary skill in the art would have had a reasonable expectation of providing flavor to the Shahidi composition by adding known flavor agents to it. The composition as combined would naturally contain

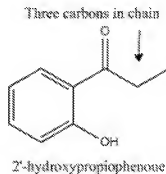
a wintergreen odor or flavor due to the presence of 2'-hydroxyacetophenone because 2'-hydroxyacetophenone is similar to 2 compounds – only differing by the length of a carbon chain – already known to have wintergreen flavor (2'-hydroxypropiophenone) or odor (salicylaldehyde). The Good Scent Company discloses the odor of salicylaldehyde is described as, inter alia, cinnamon-wintergreen. Greenberg discloses 2'-hydroxypropiophenone can be used to impart a wintergreen flavor to compositions. See abstract; column 2, lines 47-49. These 2 previously reported compounds differ from each other by the length of the carbon chain, i.e., from 1 carbon to 3 carbons; however, this difference did not alter the wintergreen odor/flavor possessed by each one. 2'-hydroxyacetophenone differs from the previously reported compounds in that it contains 2 carbons instead of 1 or 3 carbons:



Prior art description:
medicinal, cinnamon-wintergreen
cooling note, spicy (The Good Scent Co.)



Current invention ingredient D



Prior art description:
wintergreen note (US 5,795,816)

Due to the similarity in the structure of the 2'-hydroxyacetophenone currently claimed to the structures of salicylaldehyde and 2'-hydroxypropiophenone and the fact that altering the carbon chain length from 1 carbon to 3 carbons did not alter the

wintergreen note of salicylaldehyde and 2'-hydroxypropiophenone, 2'-hydroxyacetophenone would likely also have a wintergreen flavor or odor.

With regard to claim 3, the ratio of compounds A) : B): C): D) :E) in parts by weight of about 5-80 : 10-90 : 100-500 : 100-500 : 0-200 are *prima facie* obvious because the '491 patent discloses concentration ranges for the flavor agent (0.01% to about 5.0%) that overlap the weight ratios claimed. For example, 0.8%, 0.9%, 5%, 5%, and 0% of A), B), C), D) and E), respectively, reads on a ratio of 80:90:500:500:0 for A) : B): C): D) :E).

Conclusion

No claims are allowed.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRIS SIMMONS whose telephone number is (571)272-9065. The examiner can normally be reached on Monday - Friday from 7:30 - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Krass can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. S./
Examiner, Art Unit 1612

/Patricia A Duffy/

Primary Examiner, Art Unit 1645